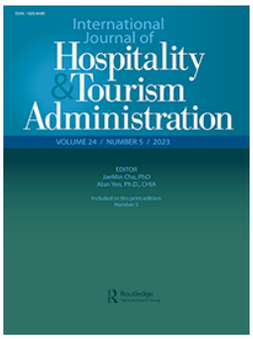

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Market Competition, Balanced Scorecard, and Their Effects on Hotel Organizational Performance and Manager's Satisfaction

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ABSTRACT

This study examines the effect of market competition as a determinant of the balanced scorecard (BSC) system and the two consequences of organizational performance and managers' satisfaction. Four hypotheses are tested using partial least squares structural equation modeling. The data were collected from 145 valid responses from four- and five-star hotels in Turkey and focused on the pandemic period. The results revealed that market competition does not affect the use of BSC. Nevertheless, the BSC leads to better organizational performance and system satisfaction for managers. Managers' satisfaction with the BSC was also positively related to the performance of hotel organizations.

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Balanced scorecard; COVID-19; performance measurement; market competition; manager satisfaction; organizational performance

Introduction

The hotel industry since the beginning of 2022 has finally entered in a post-Covid era (Xu et al., 2022). The data are supportive of strong growth and rapid turnaround: "World Tourism Barometer from UNWTO reveals that monthly arrivals were 64% below 2019 levels in January 2022 and had reached −27% by September" (UNWTO, 2022, p. 1). Given this trend, what is the value of the studies that currently analyze performance determinants (Fatima & Elbanna, 2020; Sainaghi, 2010a) during the pandemic? Many answers can be provided. First, the hotel industry is strongly affected by many types of shocks (Giousmpasoglou et al., 2021). Therefore, knowing the effects generated by the pandemic help researchers and practitioners to oppose future crises. Second, the current economic scenario is again very uncertain, with a dramatic inflation (an old problem but with new characteristics), the war between Ukraine and Russia and other international tensions, the rising problem of energy supply (especially for Europe). Furthermore, after 15 years of expansive macroeconomic policy, a new restrictive cycle is started,

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characterized by high interest rates and reducing liquidity in the system. In this scenario, analyzing the effect generated by the pandemic is not trivial.

The global COVID-19 pandemic caused many challenges in the business environment. Businessesin particular hotels, stopped operating and suffered a tremendous decline in their services; consequently, they were faced with a financial crisis (Giousmpasoglou et al., 2021; Le & Phi, 2021; Sobaih et al., 2021; Taşçıoğlu & Yener, 2021). Many businesses have had to transform their business operations in accordance with the emerging market conditions in the wake of the pandemic crisis. Hotels have still been making great efforts to recover given the rising economic and competitive turbulence. Therefore, they must strategically adapt their operations to the current uncertain market circumstances (Le & Phi, 2021).

A performance measurement system (PMS) is defined as gathering, analyzing, reporting, and interpreting performance data for effective decision-making (Melnyk et al., 2014; U. S. Bititci et al., 2018; Smith & Bititci, 2017). The literature on performance measurement reports the importance of PMS on organizational achievements and specifically states that it is crucial to understand the fundamental mechanisms that explain how the PMS effectively works and contributes to organizational performance (U. Bititci et al., 2012; Bourne et al., 2013). The contingency approach herein emphasizes that no universal PMS best suits all organizations in every circumstance, but its appropriateness depends on the specific conditions in which a company finds itself (Chenhall, 2006; Melnyk et al., 2014; Otley, 2016). At this point, the external changing environment is a robust factor that has an impact on the shape and use of an organization's ideal PMS (Chenhall, 2006; Otley, 2016; Taheri et al., 2019). Market competition as one of the external factor refers to the level of competition a firm faces in the market (Chong et al., 2005; Hoque et al., 2001), and it is the groundwork of contingency-based research. Market competition makes managers' decision-making more complex due to volatile, uncertain, complex, and ambiguous (VUCA) characteristics of the operating environment (Nudurupati et al., 2020). Despite the hotel industry is entered in a clear post-COVID stage, this industry can also meet with other shocks in the future. Therefore, knowing the effects generated by market environment plays a pivotal role. Considering this, understanding and driving organizational performance solely through outcome-oriented measurement is not sustainable; instead, it should be process-oriented (Atkinson & Brander Brown, 2001; Henri & Wouters, 2020; Kennerley & Neely, 2003; Sharma et al., 2021). Therefore, managers need to use a strategic PMS that provides the reliable and necessary information to improve the quality of their decisions about the issues that confront them (Rikhardsson et al., 2020; Smith & Bititci, 2017). As a strategic PMS, the balanced scorecard (BSC) is designed to provide managers with a method of translating a firm's strategy into a set of financial and non-financial measures that include different areas of firm (Chenhall & Langfield-

Smith, 2007; Doran et al., 2002; Fatima & Elbanna, 2020), thus, helping them understand the firm's competencies which are important for a competitive advantage (Hoque et al., 2001; Lee & Yang, 2011).

With respect to abovementioned points, some studies highlight that more research is needed to illuminate the contingency context of strategic PMS (Bourne et al., 2013; Kennerley & Neely, 2003; Rikhardsson et al., 2020), especially in the hotel industry (Fatima & Elbanna, 2020; Sainaghi et al., 2017; Taheri et al., 2019). However, limited studies have examined the impact of market competition on the use of PMSs in the hotel industry (McManus, 2013; Pavlatos & Paggios, 2009), with the exception of the BSC. As the hotel industry has started to recover, there is a need to understand how the PMS use is developed in the new market conditions. For example, currently arising developments (e.g., more automated services in hotels) are affecting the competition. Therefore, this research will investigate the relationship between market competition and the BSC use during the COVID-19 period, in developing tourism destination, Turkey. Although the tourism industry in Turkey has grown rapidly, hotel organizations face several challenges, such as competition, economic and political instability (Avci et al., 2011; Köseoglu et al., 2013), and more importantly, the dramatic decline of revenues due to the global pandemic (Taşçıoğlu & Yener, 2021). So, given the current volatile environment, this research is timely in discovering the impact of competition on the BSC use, which is one of the contributions of this study.

Furthermore, the study determines the relationship of the BSC with two outcomes: organizational performance and managers' satisfaction. Although numerous attempts have documented the positive linkage between different performance measurement practices and performance results, recent studies call for further examination, saying that this issue is still inconclusive (Endrikat et al., 2020; Rikhardsson et al., 2020; U. S. Bititci et al., 2018). Notably, Fatima and Elbanna (2020) highlighted the need to examine the current status of hotel PMS and its relationship with organizational performance during the pandemic. Additionally, little is known about managers' satisfaction (Abernethy & Bouwens, 2005; Haldma & Lääts, 2002; Rikhardsson et al., 2020), and in the light of these apparent gaps, this study will empirically determine whether the BSC leads to managers' satisfaction and improved performance of hotel organizations in Turkey.

As a result, motivated by the abovementioned lack of adequate researches, this study addresses first the relationship between market competition and the use of the BSC and then the relationship between the BSC and the two outcomes (organizational performance and managers' satisfaction). Our findings are expected to contribute to the existing hotel performance measurement literature in a timely manner. From a practical perspective, measuring

performance, being aware of organizational strengths and weaknesses are particularly important for hotel managers because they have experienced severe pressure due to the impact of COVID-19. So, the study offers managers some guidelines toward using the BSC in these complex and ambiguous times.

Background and Hypotheses Development

Figure 1 depicts an overview of the framework of this study. The contingency approach underpins much of the research in organizational performance measurement (Baines & Langfield-Smith, 2003; Lee & Yang, 2011; Otley, 2016) as it explains why different types of performance measurement practices (e.g., budgeting, activity-based costing, and the BSC) are used by different companies. Specifically, the theory emphasizes that no universal PMS best suits all organizations in every circumstance; instead, its appropriateness depends on the specific conditions in which a company finds itself (Chenhall, 2006; Melnyk et al., 2014; Otley, 2016). In this regard, the performance measurement literature states that the effective design and use of a PMS depend on a firm's ability to accept changes in the external environment, such as market competition (Hoque et al., 2001; Lee & Yang, 2011; McManus, 2013; Mia & Clarke, 1999; Nudurupati et al., 2020; Rikhardsson et al., 2020). Hence, we will examine the relationship between market competition and the use of the BSC in the context of Turkish four- and five-star hotels.

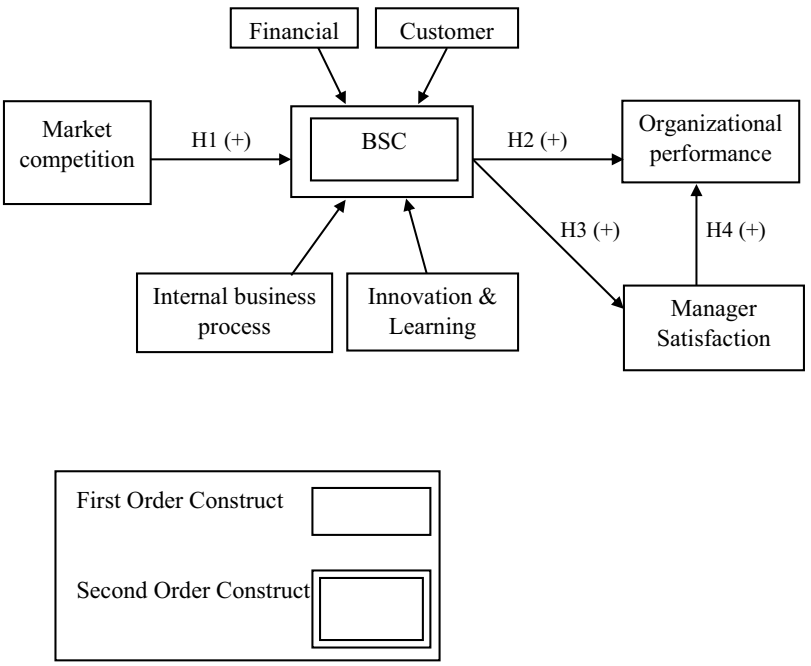

Figure 1. Conceptual framework.

Market Competition and the Balanced Scorecard

Research related to competition has attracted growing interest in tourism and hospitality. Numerous factors impact the characterization of market competition, including frequent technological advancements, the launch of new products/services, the market behavior of competitors, changes in government regulations and policies, and price cuts (Chong et al., 2005; Hoque et al., 2001; Mia & Clarke, 1999); hence, it creates risk, turbulence, and uncertainty. Specifically, new competitive realities are based on business innovation, sustainability, technological efficiency, customer responsiveness, and concerns that unavoidably transform firms' internal work processes, such as performance measurement practices (Harrington & Kendall, 2007; Nudurupati et al., 2020). Therefore, PMS plays a critical role in providing information for decision-making, understanding and maintaining an organization's core competency, and managing a turbulent and competitive environment (Chong et al., 2005; Kennerley & Neely, 2003; U. S. Bititci et al., 2018).

Previous studies mainly focused on manufacturing industry and argue that market competition has an impact on a firm's adoption and use of different types of performance measurement practices (Ahmad & Mohamed Zabri, 2015; Al-Omiri & Drury, 2007; Guilding et al., 2005; Hansen & Van der Stede, 2004; Mia & Clarke, 1999). For example, Ahmad and Mohamed Zabri (2015) reported that the intensity of market competition is significantly related to the use of management accounting practices in Malaysian medium-sized manufacturing firms. Another study with 71 manufacturing units in New Zealand demonstrated that businesses using multiple measures for performance evaluation are associated with high competition (Hoque et al., 2001). Whereas Lee and Yang (2011) examined the impact of the intensity of market competition on the use of integrated PMS in Taiwanese firms and found an insignificant relationship.

In the hotel industry, limited studies have been done with mixed results (McManus, 2013; Patiar & Mia, 2008; Pavlatos & Paggios, 2009). McManus (2013) revealed that hotels experiencing a high level of competition are more likely to utilize customer accounting and marketing performance measures. However, Pavlatos and Paggios (2009) conducted a study in Greece hotels and found no linkage between the level of competition and cost system design. Hotel organizations have greater exposure to a competitive environment because of competitors' aggressive marketing activities that result in frequent changes in customer preferences and demands. More recently, it is believed that the trend of competition in the industry has been changing with COVID-19 after effects. For example, increasing artificial intelligence and automated services are in place to minimize interaction and maximize customer value, also more flexibility is provided in terms of cancellation policies for customers etc. (Giousmpasoglou et al., 2021). Therefore, hotels should continuously

identify changes in the market environment to adapt operations and measure their effectiveness and efficiency (Singh et al., 2020). At this point, the use of BSC system with its four dimensions (finance, customer, internal business process, and innovation and learning) provides organizations with the necessary information to respond to the competitive environment and sustain long-term success (Kaplan & Norton, 2001).

The abovementioned studies mainly focused on manufacturing industry and little attention was given to hotel industry. In addition, they considered performance measurement practices other than the BSC, and their lack of coherent findings leaves a gap in how the market competition impacts the use of the BSC. Hence, the following hypothesis is formulated.

H1: Market competition is positively related to the use of the BSC in the hotel industry.

The Balanced Scorecard and Its Outcomes

A PMS is defined as gathering, analyzing, reporting, and interpreting performance data for effective decision-making (Melnyk et al., 2014; Neely, 2005; U. S. Bititci et al., 2018; Smith & Bititci, 2017). It plays a key role in helping organizations translate their strategy into desired outcomes, providing operational effectiveness, communicating expectations, monitoring business progress, providing feedback, and motivating employees through performance-based rewards (Chenhall & Langfield-Smith, 2007; Ittner et al., 2003; Kaplan & Norton, 2001; Sandt et al., 2001).

In the past, performance measurement practices were solely based on traditional financial measures, such as return on equity, reduction of cost, profitability, etc., exposing them to criticism due to inaccurate demonstration of business performance (Bourne et al., 2013; Sainaghi et al., 2019, 2013, 2017; Taheri et al., 2019). More specifically, these measures are historic, they only indicate short-term business achievements, they do not have a strategic focus, or an innovative outlook (Atkinson & Brander Brown, 2001; Hoque et al., 2001; Kaplan & Norton, 1992, 2001; Kennerley & Neely, 2003; Lucianetti et al., 2019; Sainaghi, 2010b; Sainaghi, 2010a). Furthermore, they cannot provide non-financial information, such as quality of products/services, changing customer needs, suppliers, employees, and operations, etc., which are early warning signs for timely improvements (Henri & Wouters, 2020). The solution was found by injecting non-financial measures as leading indicators into PMS to involve every dimension of a firm's value chain (Bourne et al., 2013; Henri & Wouters, 2020; Lee & Yang, 2011; Sainaghi et al., 2013; Taheri et al., 2019). Thus, a comprehensive PMS can indicate a firm's internal strengths that help recognize problems, direct efforts, and assess the potential for future

development (Baines & Langfield-Smith, 2003; U. Bititci et al., 2012; Kaplan & Norton, 1992, 2001; Lucianetti et al., 2019; Sainaghi et al., 2019). With this in mind, Kaplan and Norton's (1992) balanced scorecard (BSC) is the most widely adopted PMS in modern organizations worldwide (Fatima & Elbanna, 2020; Kennerley & Neely, 2003; Otley, 2016). The BSC combines strategically aligned performance measures under its four perspectives: financial, customer, internal business process, and innovation and learning (Doran et al., 2002; Kaplan & Norton, 1992, 2001). The BSC furnishes firms with broad information about industry trends, employees' morale and satisfaction, customers' satisfaction, and their intention for repeat purchases, etc. In this way, it provides reliable feedback and measures organizational performance in a more balanced and holistic manner (Kaplan & Norton, 2001; Sandt et al., 2001).

Consistent with the above arguments, although the previous studies mainly produced positive outcomes regarding the relationship between different types of performance measurement practices and firm performance (Baines & Langfield-Smith, 2003; Bourne et al., 2013; Henri & Wouters, 2020), recent studies call for further examination, emphasizing that this issue is still inconclusive (Endrikat et al., 2020; Rikhardsson et al., 2020; U. S. Bititci et al., 2018).

In the hospitality industry, Doran et al. (2002) reported the potential usefulness of the BSC, problems, and pitfalls associated with its implementation and potential remedies for them. Authors' review of case studies and their interviews with hotel managers demonstrated that development and implementation of the BSC can be a complex and long process hence requires necessary time, resources, and support, linkage to the hotel's mission and strategy, and continuing learning and adjustment. Recently, a longitudinal study was done by Sainaghi et al. (2019a) to examine the BSC model in the context of analyzing a destination new product development process. Nevertheless, existing literature has limited empirical studies that examine the relationship between performance measurement practices and performance results in the hotel industry (Arasli et al., 2019; Taheri et al., 2019). Arasli et al. (2019) found a positive relationship between the adoption of BSC dimensions and hotel performance in five-star Antalya resort hotels, and according to Taheri et al. (2019), comprehensive PMS positively influences travel agency performance. Nevertheless, McManus's (2013) outcomes indicated no relationship between customer accounting and marketing performance measures and hotel performance. In this context, the BSC appears appropriate for hotel companies because the system provides a link between hotels and their stakeholders, such as shareholders, guests, and employees, so it should be considered as the modern hotel PMS (Elbanna et al., 2015; Sainaghi, 2010a; Sainaghi et al., 2019, 2013). Recently, Fatima and Elbanna (2020) emphasized the need to examine the current status of hotel PMS and its relationship with organizational performance during the pandemic.

Therefore, in the light of this gap and being consistent with these widely held views, we suggest that the BSC provides hotels with relevant information and helps them improve their performance (both financial and non-financial) and achieve a competitive advantage. Therefore, our second hypothesis is:

H2: The use of the BSC is positively related to organizational performance in the hotel industry.

In addition to the abovementioned outcome of PMS, previous research investigated the association between various performance measurement practices and user satisfaction. Some prior studies focused on the activity-based costing (ABC) system and found a positive effect on user satisfaction (Norris & Innes, 2002; Pike et al., 2011). Similarly, studies revealed managers' satisfaction with their management accounting information systems and reported that when these systems provide information that benefits decision-making, managers become satisfied (Abernethy & Bouwens, 2005; Haldma & Lääts, 2002). Hansen and Van der Stede (2004) also documented that budget performance for operational planning, communication of goals, performance evaluation, and strategy formation are all positively related to overall budgeting system satisfaction. Furthermore, Sandt et al. (2001) noted the positive influence of balanced PMS on managers' satisfaction in diverse industries in Germany. Ittner et al. (2003) similarly discovered that financial services firms using a broad set of financial and non-financial measures are more satisfied with their measurement system. However, a recent study by Rikhardsson et al. (2020) found no relationship between management satisfaction and the use of a variety of performance measures in a highly uncertain environment.

As a result, these studies have contradictory findings and clearly underscore the need for more research, especially considering the BSC. To our knowledge, no study has considered the relationship between the BSC use and managers' satisfaction with the BSC as a PMS in the hotel industry, which is one of the contributions of this study. Therefore, the following hypothesis is proposed:

H3: The use of the BSC is positively related to managers' satisfaction in the hotel industry.

Besides, limited research has considered the link between managers' satisfaction with the PMS and firm performance. Abernethy and Bouwens (2005) pointed out that user satisfaction with a management accounting system influences performance. Ittner et al. (2003) indicated that managers' satisfaction concerning the use of financial and non-financial measures leads to better stock market returns. We assume that managers are satisfied with the BSC use as the information provided by the system benefits them in making better decisions

that result in improved organizational performance in terms of financial and non-financial aspects. Therefore, the following hypothesis is formulated:

H4: The manager's satisfaction with the BSC is positively related to organizational performance in the hotel industry.

Methodology

Sampling Approach and Data Collection

This study included four- and five-star hotels in Turkey. The reason of selecting these large and institutionalized hotels is to ensure reliable responses related to the use of the BSC. In this study, the distributed questionnaires were filled by only one manager (general manager, assistant general manager, or the manager who has the authority to represent the general manager) from each hotel. Considering purposive sampling, we chose this population because we expect them to have engaged in strategic and operational decision-making processes and also have the requisite knowledge for the purpose of this paper. A research member contacted to these senior managers; explained the objectives of the study and described the concept of the BSC system. As an evaluation criteria of the BSC; its four dimensions (financial, customer, internal business process and, innovation and learning) and their relevant measures were provided in the survey. So, according to these criteria, only the ones affirming the use of the BSC dimensions and measures in their hotels were included in the sample. The surveys were sent to these managers by providing a link of survey and informed them that their participation was anonymous.

Before starting to data collection, items of each construct were translated into Turkish language using a back-translation approach. Then, a pilot study was conducted with 15 respondents to assess the clarity and validity of questions. Minor changes were made on the wording of some items based on the constructive feedbacks from respondents. As a result, a total of 180 questionnaires were distributed to hotel managers in the form of an online survey, and 145 responses were obtained for data analysis, yielding a satisfactory response rate of 81%, particularly during the pandemic. Table 1 presents the respondents' profile.

Research Design and Survey Instrument

We measured managers' perceptions of market competition using McManus (2013) scale of four items (e.g., competition for service promotion) on a seven-point Likert-type scale, ranging from 1 to 7. With respect to the BSC scale, although some studies considered integrated performance measures (Hoque et al., 2001; Lee & Yang, 2011; Rikhardsson et al., 2020), Elbanna et al.'s (2015) developed the BSC scale for the hotel industry. Thus, the BSC was measured

Table 1. Respondents' profile (n = 145).

Characteristics	Frequency	Percent
Gender		
Male	122	84.1
Female	23	15.9
Age		
18–27	13	9
28–37	30	20.7
38–47	48	33.1
48–57	53	36.6
58 and older	1	0.7
Education		
Secondary school	3	2.1
High school	22	15.2
Two-year college degree	20	13.8
Four-year college degree	76	52.4
Graduate degree	24	16.6
Hotel Category		
Five-star	105	72.4
Four-star	39	26.9
Organizational tenure (years)		
Less than 1	27	18.6
1–5	68	46.9
6–10	25	17.2
11–15	8	5.5
16–20	7	4.8
Longer than 20	9	6.2

utilizing Elbanna et al.'s (2015) scale of 33 items which includes four dimensions: finance (e.g., financial stability), customer (e.g., customer satisfaction), internal business process (e.g., operational efficiency), and innovation and learning (e.g., staff capabilities). Here, a five-point Likert-type scale ranging from 1 "to a little extent," 3 "to some extent" and 5 "to a great extent" was used to measure managers' use of each measure across the four dimensions. Organizational performance was measured from a subjective perspective because obtaining actual performance data was difficult due to privacy (Avci et al., 2011). In Turkey, hotel organizations' performance information is regarded as highly confidential and, therefore, hotel managers are reluctant to provide such information. This performance scale was adopted from McManus (2013) and measured with seven items (e.g., return on investment). A seven-point Likert-type scale ranging from 1 "well below average" to 7 "well above average" was used to assess the performance of managers' hotels relative to their competitors. Finally, managers' satisfaction with the BSC was measured using the three items (e.g., overall satisfaction with the system) adopted from Ittner et al. (2003) on a six-point Likert-type scale, ranging from 1 to 6. The measurement items used in this study are shown in Table 2.

Data Analysis

This study used Partial Least Squares Structural Equation Modeling (PLS-SEM) for analyzing the data. PLS-SEM has become prominent and increasingly used in different fields, such as strategic management (Hair et al., 2012),

Table 2. Results: assessment of measurement model for first-order constructs.

Construct/related items	Outer loadings	Cronbach's alpha	CR	Rho-A	AVE
Market Competition:		0.823	0.883	0.870	0.655
C1.Competition in the industry is cut-throat.	0.903				
C2.There are many service promotion wars in the industry.	0.706				
C3.Competition for market share in the industry is intense.	0.863				
C4.Price competition in the industry is intense.	0.748				
Finance:		0.923	0.937	0.928	0.622
F1.Gross operating profit	0.740				
F2.Return on sales	0.769				
F3.Growth rate of sales or revenues	0.827				
F4.Budget	0.809				
F5.Revenue per available room	0.804				
F6.Achieving predicted room and occupancy rates	0.674				
F7.Meeting financial targets	0.868				
F8.Liquidity	0.809				
F9.Financial stability/soundness	0.786				
Customer:		0.900	0.919	0.904	0.558
C1.Feedback from guest surveys	0.844				
C2.Feedback from mystery guest program	0.741				
C3.Verbal feedback via staff	0.783				
C4.Average spend of customer	0.685				
C5.Customer satisfaction level	0.763				
C6.Customer retention rate	0.707				
C7.Market share	0.818				
C8.Market share growth	0.728				
C9.Social responsibilities	0.634				
Internal Business Process:		0.786	0.865	0.796	0.619
IBP1. Quality of services provided, e.g., check in	0.842				
IBP2.Efficiency of operations, e.g., booking, room service	0.881				
IBP3.Productivity levels, e.g., labor productivity	0.797				
IBP6.Proper completion of planned projects/initiatives	0.598				
Innovation &Learning:		0.882	0.909	0.894	0.589
IL1.Number of new services/products	0.760				
IL2.Process improvement initiatives	0.792				
IL3.Building network of relationships with stakeholders	0.750				
IL6.Staff capabilities	0.651				
IL7.Staff satisfaction	0.850				
IL8.Staff development	0.853				
IL9.Staff retention rate	0.695				
Organizational Performance:		0.913	0.931	0.915	0.658
P1.Sales growth	0.780				
P2.Profitability	0.858				
P3.Return on investment	0.843				
P4.Market share	0.859				
P5.New service development	0.793				
P6.Customer satisfaction	0.700				
P7.Overall performance	0.836				
Manager's Satisfaction:		0.935	0.958	0.937	0.885
S1.The system exceeded my expectations.	0.925				
S2.The system is very close to my concept of an ideal system.	0.960				
S3.I am completely satisfied with the system.	0.936				

accounting (Lee et al., 2011), and hospitality (Ali et al., 2018; Taheri et al., 2019). PLS-SEM is superior to other statistical methods and has many advantages: it enables researchers to analyze the measurement model and structural model simultaneously; it is more appropriate when research models are complex and the assumed cause-and-effect relationships are not sufficiently

explored; it provides higher statistical power when dealing with small samples; it is suitable for reflective, formative, and higher-order constructs (Ali et al., 2018; Hair et al., 2017; Lee et al., 2011; Taheri et al., 2019). PLS-SEM was used with the SmartPLS software version 3.0 for analyses (Ringle et al., 2015). In our study, we followed the disjoint two-stage approach (Sarstedt et al., 2019). The market competition, organizational performance, and managers' satisfaction were included as reflective constructs while the BSC was included as a second-order reflective-formative construct. Here, as a second-order construct, the BSC includes four dimensions which are reflective constructs: finance, customer, internal business process, and innovation and learning. A two-stage approach was used to establish the second-order construct to assess the measurement model of the initial framework (Ali et al., 2018).

Results and Findings

Assessment of Measurement Model

In the first stage, reliability and the convergent validity of the measurement model which includes seven reflective first-order constructs (market competition, finance, customer, internal business process, innovation and learning, organizational performance and managers' satisfaction) were assessed by examining the outer loadings of the items associated with each construct, Cronbach's alpha, composite reliability (CR), Rho-A, and average variance extracted (AVE) (Ali et al., 2018; Hair et al., 2017, 2019). To establish reliability, the outer loadings, CR, Cronbach's alpha, and rho-A of the constructs should be higher than 0.7 (Ali et al., 2018; Hair et al., 2017). To establish convergent validity, AVE values should exceed 0.5 (Ali et al., 2018; Chin, 2010; Hair et al., 2017). Nonetheless, loadings between 0.5 and 0.7 are acceptable if CR and AVE meet the threshold (Hair et al., 2017). Table 2 indicates that the results for all constructs are acceptable, thus, reliability and convergent validity are established.

Discriminant validity was assessed according to the Fornell–Larcker criterion and heterotrait–monotrait (HTMT) approaches (Henseler et al., 2015). To assess discriminant validity, the square root of the AVE value for each construct is greater than its correlation with other constructs in the model (Fornell & Larcker, 1981; Hair et al., 2017). Henseler et al. (2015) stated that the value of HTMT for all constructs should be less than 0.9 to establish discriminant validity. In Table 3 and Table 4, the results show that all constructs in the model meet these two conditions, indicating sufficient discriminant validity.

In the second stage, the BSC as second-order formative construct was established by using the score of its related dimensions from the first stage. The finance, customer, internal business process, and innovation and learning established the second-order BSC construct. So, in the second stage, this

Table 3. Discriminant validity; Fornell – Larcker.

	1	2	3	4	5	6	7
1. IBP dimension of BSC	**0.787**						
2. Customer dimension of BSC	0.748	**0.747**					
3. Market Competition	0.009	−0.068	**0.809**				
4. Financial dimension of BSC	0.403	0.588	−0.135	**0.789**			
5. I&L dimension of BSC	0.718	0.691	0.045	0.403	**0.768**		
6. Organizational Performance	0.578	0.702	−0.090	0.706	0.503	**0.811**	
7. Manager's Satisfaction	0.486	0.552	0.084	0.373	0.501	0.547	**0.941**

Abbreviations: BSC, balanced scorecard; IBP, internal business process; I&L, innovation and learning.

Table 4. Discriminant validity; HTMT.

	1	2	3	4	5	6	7
1. IBP dimension of BSC							
2. Customer dimension of BSC	0.895						
3. Market Competition	0.077	0.135					
4. Financial dimension of BSC	0.477	0.639	0.170				
5. I&L dimension of BSC	0.876	0.785	0.125	0.440			
6. Organizational Performance	0.685	0.774	0.134	0.760	0.562		
7. Manager's Satisfaction	0.563	0.605	0.110	0.392	0.545	0.593	

Abbreviations: BSC, balanced scorecard; IBP, internal business process; I&L, innovation and learning.

study's model includes one second-order formative (BSC) and three reflective (market competition, organizational performance, and managers' satisfaction) constructs. To assess the formative construct, multicollinearity was determined using variance inflation factors (VIF) and the significance of outer weights (Hair et al., 2017). The VIF values should be lower than 5, and the outer weights of the formative construct's items should be significant for having an acceptable measurement model (Ali et al., 2018; Hair et al., 2017). The results indicate that a lack of collinearity was confirmed as the VIF values for four dimensions of the BSC were between 1.537 and 3.186, and the outer weights of these items were significant. Thus, the results proved that the measurement model is robust.

Assessment of Structural Model

Following the validation of the measurement model, the assessment of the structural model began with the coefficient of determination (R^2) for each endogenous latent variable. The amount of variance in the model is explained by R^2 (Chin, 2010). The R^2 values for hotel performance and managers' satisfaction were 0.644 and 0.310, respectively, indicating that the overall condition of these two variables in the model is satisfactory. Table 5 presents the results of the hypothesized relationships. A bootstrapping procedure was performed to assess the statistical significance of the path coefficients (Hair et al., 2017; Ringle et al., 2015). The results generally supported the hypotheses developed in this study, including the direct effects of BSC use and managers' satisfaction with organizational performance in a hotel context (H2 and H4),

Table 5. Results of hypotheses.

	Path Coefficient	P Value	t Value	Confidence interval (bias corrected)	Supported
H1. Market Competition→ BSC	−0.104	0.244	0.693	[−0.212, 0.234]	No
H2. BSC → organizational performance	0.701	<0.01	11.097	[0.584, 0.794]	Yes
H3. BSC → manager's satisfaction	0.557	<0.01	8.525	[0.418, 0.643]	Yes
H4. Manager's satisfaction with BSC → organizational performance	0.162	0.019	2.065	[0.038, 0.295]	Yes

Abbreviations: BSC, balanced scorecard.

and the direct effect of BSC use on managers' satisfaction (H3). However, the results did not support the direct effect of market competition on BSC use (H1).

Discussion

This study contributes to knowledge in that it is the first, to the authors' knowledge, to examine the managers' perceived market competition and its effect on the use of the BSC during the global pandemic as well as its subsequent effects on organizational performance and managers' satisfaction in four- and five-star hotels in Turkey. The first hypothesis investigated the impact of market competition on the use of the BSC in hotels (H1). In contrast to previous research (McManus, 2013; Patiar & Mia, 2008), H1 was not confirmed as the market competition did not increase the use of the BSC. However, considering the COVID-19, our finding is reasonable. In fact, first, many hotels were forced to amend their business operations process and second, the pandemic reduced the long-term prevision. Related to this, recent studies specified the importance of adapting new internal hotel operations for improving customers' experience, which in turn enable hotels to remain competitive in a volatile market (Giousmpasoglou et al., 2021; Sharma et al., 2021). So during the pandemic period, their prior focus is to achieve these operational changes efficiently which will subsequently provide them sustainable competitiveness. Hence, hotel organizations have tended more on ensuring internal operational efficiency in order to enhance services, rather than first focusing the market competition-related matters. These could be the possible explanations behind the reason of our non-significant finding of Hypothesis 1. Therefore, based on our timing, this result is perfectly in line with the context.

The second hypothesis determined the relationship between the use of the BSC and organizational performance (H2). The results are consistent with our expectations that the use of BSC system in hotels leads to improved organizational performance, in line with the previous studies (Arasli et al., 2019; Taheri et al., 2019). The BSC's comprehensive measures provide managers with the

necessary information that they rely on and use to improve performance results.

The third hypothesis investigated the association between the use of the BSC and hotel managers' satisfaction with the BSC system (H3). The results supported this hypothesis which is consistent with the findings of other studies (Ittner et al., 2003; Sandt et al., 2001) that the functionality of the BSC has a positive impact on the managers' satisfaction with the system. Finally, we investigated the manager's satisfaction with the BSC and organizational performance relationship (H4). The results indicated that this relationship is statistically significant, similar to the results of Abernethy and Bouwens (2005).

Theoretical Implications

From a theoretical perspective, the results revealed in this paper suggested that hotels' use of the BSC was not influenced by perceived market competition. Although contrary to the prior works, this finding is in line with the current context. The reason is related to the catastrophic effects of COVID-19 on the hotel industry. In the recent past, hotels had dwelled more about the market competition for gaining competitive opportunity. And, since the environment was more stable, they could better predict their future and adapt their PMS accordingly. However, the pandemic has caused challenges in adapting the BSC system to the changing information needs due to sudden changes in the external conditions of the firm. More importantly, it reduced the long-term prevision. So, adapting internal operational processes for the post-COVID-19 era is a top priority for hotels as this will ensure their survival and competitiveness in the sector (Giousmpasoglou et al., 2021; Sharma et al., 2021). Therefore, hotels with the consideration of the pandemic crisis they faced have tended more on internal operational efficiency. Consistent with the contingency theory, our results timely shed light on the time context–organizational PMS relationship. Herein, Rikhardsson et al. (2020) also highlighted that the fit between an organization's PMS and the environment can change as environmental conditions change. That is taking into consideration the after-effects of COVID-19, a high standard of customer service is required; therefore, hotels should focus on providing effective employee training and development programs, using technology efficiently, minimizing physical interactions, and maintaining hygiene on the premises. All these indicate hotel organizations to primarily ensure internal operational efficiency for recovering and achieving their performance targets in the new normal.

Furthermore, our results displayed a positive significant relationship between the BSC and improved organizational performance. As stated by prior studies (Arasli et al., 2019; Doran et al., 2002; Sainaghi et al., 2013), the combination of financial and non-financial dimensions of BSC provides

managers relevant information (e.g., customers, service operations, employees) that they trust and use this information to make better decisions. Considering the impacts of new normal on hotel operations, the BSC two dimensions (innovation and learning and internal business process) are particularly helpful for managers to identify the need of improvement in these areas. Hence, it can be said that the system measures organizational performance in a holistic manner.

We also believe it is important to understand hotel managers' satisfaction with the BSC system. While the reverberations of COVID-19 continue, managers' satisfaction rate actually reveals whether there is a need or not to readjust the indicators of PMS. Similar to the findings of prior works (Ittner et al., 2003; Sandt et al., 2001), our results show that using the BSC leads to managers' satisfaction. The comprehensive aspect of the BSC system helps to managers' decision-making matters. Also, the system is linked with organizational strategy thus drives value starting from the bottom line to the entire hotel. That is why, managers are satisfied with these benefits of the BSC which improved their decision-making and this in turn, enhances organizational performance. Our outcomes, thus, add to the hotel performance measurement literature by demonstrating that hotel companies can benefit from using a strategically aligned BSC system and create managerial satisfaction that results in better performance.

Practical Implications

The findings of our study are informative for hotel managers intent on developing their BSC systems. The results related with the relationship between market competition and the BSC implies that competition-related matters are not in the foreground for hotel managers during the pandemic period; instead, their primary efforts are on improving internal operations according to current industry requirements.

After the industry reopened, competition has started to increase again as tourism and travel activities relaunched. So, it is critical for hotel managers to collect the information about current external circumstances, such as changing customer preferences and expectations, quality requirements, and market dynamics in order to be responsive to the post-COVID era. For example, hotel companies have focused on implementing health and safety procedures in order to reduce guests' concerns (Le & Phi, 2021) and to provide guest satisfaction with their painstaking services. In addition to this, many people have started to experience technological advancements such as artificial intelligence, virtual reality in their daily lives. Related to this, Henri and Wouters (2020) underscored the rising importance of innovation in terms of evolving technology and internal business processes. To illustrate, hotel innovation has recently involved new service automation that includes digital menus, online

service ordering, contactless check-in/check-out, and mobile caretaker applications (Le & Phi, 2021). All these indicate that hotel technology development accelerated since the COVID-19 pandemic and customers expect to experience advanced technology featured hotel services which provide them more convenience and safety. Hence, hotel organizations must first refocus their attention on these new operational priorities to enhance the hotel experience and also must continue innovating to stay relevant in the competitive market.

As a result, these recent developments have changed the trend of competition in the industry; so hotels, in particular four- and five-star luxury hotels, are now evolving in response to the new market requirements. Hence, managers should be prudent about these developments to ensure their future sustainability. At this point, the BSC indicators assist hotel managers to understand how well they maintain their competences (e.g., employee development and technology innovations); how well they meet customers' changing needs; what operational processes they should engage to ensure customer satisfaction; and how well they achieve their financial success. As an example, many hotel employees have worried about job security as the sufficient resources were not allocated for them so that they were forced to find jobs in other sectors. Hence, when the hotels reopened, the quality labor shortage emerged and they have faced with personnel crisis. Also, in the new normal, hotels have made amendments in their operations by applying new hygienic rules and this has mostly affected the front-line, housekeeping, and food and beverage employees as they have direct contact with customers (Giousmpasoglou et al., 2021; Sharma et al., 2021). So, in order to maintain the well-being of employees as well as to stay competitive, it is critical for hotels to provide their people the necessary training and education and, its continuity. Herein, innovation and learning dimension of the BSC provides necessary information about staff capabilities, development and satisfaction which are critical to understand the employee matters. Moreover, hotels have made structural improvements in terms of their business operations. The new technologies like contactless check-in/check-out are increasingly being used to improve service (Le & Phi, 2021; Sharma et al., 2021) in the post-pandemic. Also, they have renewed their business models and are now providing diverse services such as selling villas for the customers who would like to experience private services (Giousmpasoglou et al., 2021). Related to these, the BSC' internal business process measures (such as efficiency of operations, quality of services) enable to collect information about its capacity management and operational success. To understand if these improvements are effective, the customer dimension of the BSC measures hotel customers' satisfaction and loyalty which then reflect its results on financial measures as growth rate of sales, achievement of predicted room and occupancy rates etc. Herein, our study indicates the general adaptability of the BSC indicators, which provides hotels the necessary responses for the changes happening in their context and,

needs. Nonetheless, as these operational changes have been occurring in the industry, it is critical for hotel managers to know whether these changes being implemented are successful and to what degree. For instance, how the recent technological applications will shape the future of work in hotels? And how this will be adapted performance measurement systems? Although the system is currently responsive for understanding organizational performance, it would be prudent to consider the longitudinal investigation for the BSC's future effectiveness as these developments will continue to impact industry operations. In this way, the BSC system can sustain to help hotel managers in the post-COVID-19 in terms of measuring organizational performance.

In result, the COVID-19 reduced the long-term prevision for hotel industry however, this crisis should be considered as an opportunity for the industry's future sustainability. The hotel organizations should understand the importance of preparing themselves for different types of crises as the COVID-19 is not going to be the last one. In this context, their resilience to suddenly arising situations is very critical in maintaining their continuity. Therefore, hotel organizations should provide flexible operations compatible with the new-normal requirements and attain their efficient results; this in turn will reward them with the expansion of market share and competitiveness in the long term. For that reason, managers should follow environmental developments and update their BSC indicators if necessary and link them to the hotel strategy. So, they can put their hotel strategies into practice while controlling organizational and environmental issues before they become difficult to manage. In this way, the BSC will continue to provide benefits that create satisfaction in managers so that they can make quality decisions and create value for their organizational stakeholders.

Limitations and Future Research Suggestions

This study's outcomes are subject to potential limitations. First, this study is constrained to Turkey; hence, hotel firms in other countries could be different from their Turkish counterparts. This possibly stems from differences in economic and legal policies, the nature of competition, and COVID-19-related governmental policies. However, many studies based on the BSC are usually focused on a single country (Sainaghi et al., 2019aa); therefore, future research could be devised to compare our findings with findings that relate to hotels in other countries. This empirical study could not be viewed as conclusive because causal relationships cannot be identified through the analysis of cross-sectional data to obtain reliable results. The BSC system requires time and, more importantly, the efforts of all hotel stakeholders to be implemented effectively as several obstacles and difficulties are unavoidably experienced during its implementation. A cross-sectional research design restricts the collection of any change in BSC perspectives under those as a response to the impacts of pandemic. This causes difficulty in adapting the system to the changing

information needs due to sudden changes in the external circumstances of the firm. Therefore, a longitudinal investigation is necessary to analyze and resolve these concerns. Alternatively, interviews could be conducted with hotel managers to gain better insights into their views on the functionality of BSC for the post-COVID-19 period. In addition to these, even though there is a long tradition of using Likert scales in this type of studies, they have some disadvantages such as taking a long time to answer, capturing (culture-specific) response styles, etc. (Dolnicar, 2021). Furthermore, we only used market competition, so future research could involve other predictor variables (e.g., technological efficiency, innovative strategy) to test the model. For example, it might be fruitful to include strategy and determine whether a firm's strategic choices are responsive to the newly developing trend of competition in the hotel environment. Moreover, we asked perceptual questions, so our findings are based on the hotel managers' opinions and how they chose to reveal their hotel's conditions in terms of PMS and organizational performance results. Hence, the perceptual judgment of manager of each participating hotel causes a risk of receiving biased responses. Last but not least, we only asked hotel managers to rate their BSC system satisfaction, which may cause potential measurement bias. We suggest that future research could collect data from both managers and employees and use multilevel analysis to understand employees' satisfaction with the BSC. This issue is important because hotel employees' dissatisfaction with their hotel's PMS may cause dysfunctional behavior and affect their performance negatively, which, in turn, produces poor organizational performance.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

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